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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/533,032	03/22/2000	Charles Grasso	99-056-TAP	7818

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EXAMINER

MARC, MCDIEUNEL

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/533,032

Applicant(s)

GRASSO ET AL.

Examiner

McDieunel Marc

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-18 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by **Ellis** (U.S. Pat. No. **5,237,468**).

As per claim 1, **Ellis** teaches a camera and gripper assembly for an automated storage library having data handling system (see fig. 1) comprising:

a data cartridge storage array having a plurality of bins each for removably receiving and storing a data cartridge (see fig. 1 and col. 4, lines 50-60), a robotic manipulator operatively positioned for selectively retrieving data cartridges from the bins (see fig. 1, element 36), transferring the retrieved data cartridges to and from a data reading and recording device and replacing data cartridges into the bins in accordance with instructions received from a control system operatively coupled to the robotic manipulator for directing movement of the manipulator (see fig. 1 and col. 5, lines 5-19

et seq.), the manipulator including a grasping hand for grasping a selected data (see abstract lines 1-10) and moving the data cartridge in and out of a bin and a camera mounted on the hand for sensing the location of the hand with reference to each of the plurality of bins (see abstract and col. 4, lines 50-68), wherein the camera is operated during an audit operation initiated by the control system to provide bin location data to a memory subsequently utilized by the control system to position the grasping hand of the robotic manipulator (see col. 6, lines 10-16, abstract and col. 10, lines 17-31), reading data being considered as audit.

As per claim 2, Ellis teaches a camera and gripper assembly for an automated storage library, wherein the camera is utilized only during the audit operation (see abstract and col. 10, lines 17-31).

As per claim 3, Ellis teaches a camera and gripper assembly for an automated storage library, wherein the camera includes an oscillator located on the hand whose output is selectively provided to the camera only during an audit operation (see abstract and col. 10, lines 17-31), note that oscillator being considered as “anthropomorphic robot arm”.

As per claim 4, Ellis teaches a camera and gripper assembly for an automated storage library, wherein the camera further provides identification data to the memory to

provide a map of bin location and bin content (see col. 5, lines 5-19), inherently, the map being considered as library management is available through a personal computer.

As per claim 5, Ellis teaches a camera and gripper assembly for an automated storage library, wherein manipulator positioning is only controlled by the camera during an audit operation (see col. 6, lines 10-16, abstract and col. 10, lines 17-31).

As per claim 6, Ellis teaches a camera and gripper assembly for an automated storage library, wherein the control system routinely directs movement of the robotic manipulator utilizing location data from the memory and operates the camera only during an audit operation (see col. 5, lines 5-19, col. 6, lines 10-16, abstract and col. 10, lines 17-31).

As per claim 7, Ellis teaches a camera and gripper assembly for an automated storage library that further comprising an oscillator whose output is selectively provided to the camera on the hand only during an audit operation (see abstract), note that oscillator being considered as “anthropomorphic robot arm”.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ellis** in view of **Kizuya et al.** (U.S. Pat. No. **5,365,285**).

As per claims 8, 14 and 17, **Ellis** teaches substantially a system and an associated method of a camera and gripper assembly for an automated storage library having a plurality of data storage bins arranged around a robotic manipulator for retrieving and replacing cartridges from and to the bins (see fig. 1 and col. 4, lines 50-60); a camera mounted on the manipulator for sensing a position of the manipulator with respect to the plurality of data storage bins (see abstract and col. 4, lines 50-68), the camera being operable during an audit operation to identify each bin location (see col. 6, lines 10-16, abstract and col. 10, lines 17-31), reading data being considered as audit, a manipulator control system operatively coupled to the robotic manipulator for

selectively controlling movement of the manipulator and operating the camera to sense and record manipulator position information at each bin location and store position and bin location information in a memory accessible by the manipulator control (see fig. 1, col. 5, lines 5-19 *et seq.*). Inherently, turning on or off the camera can be performed by an operator (see col. 5, lines 5-19). Ellis was silent about reduced electromagnetic radiation emissions.

However, Kizuya et al. has been shown evidence regarding the limitation of reduced electromagnetic radiation emissions (see abstract).

It would have been obvious to a person of ordinary skill in the art to modify the automated storage library of Ellis with the electro-magnetic emission of Kizuya *et al.*, because this modification would have enhanced Ellis' library in order to a reduced electromagnetic radiation emission, thereby improving the efficiency and the reliability of the emission suppression in detection of data cartridge labels.

As per claims 9 and 18, Ellis teaches a system and an associated method of a camera and gripper assembly for an automated storage library, wherein the control system performs data storage and retrieval operations utilizing the bin location and manipulator position information stored in the memory to position the manipulator (see col. 5, lines 5-19).

As per claim 10, Ellis teaches a camera and gripper assembly for an automated

storage library, wherein the manipulator comprises a grasping hand having the camera mounted thereon (see abstract).

As per claim 11, Ellis teaches a camera and gripper assembly for an automated storage library, wherein an oscillator mounted on the hand has an output enabled to operate the camera during an audit operation (see abstract), note that oscillator being considered as “anthropomorphic robot arm”.

As per claims 12, 15 and 16, Ellis teaches system and an associated method of a camera and gripper assembly for an automated storage library that further comprising a grasping hand on the manipulator having the camera mounted thereon, the camera having an oscillator having an output enabled by the control system (see abstract), note that oscillator being considered as “anthropomorphic robot arm”, wherein the control system disables the output of the oscillator and performs data storage and retrieval operations utilizing the bin location and manipulator position information stored in the memory during normal library operations; Inherently, turning on or off the camera can be performed by an operator (see col. 5, lines 5-19).

As per claim 13, Ellis teaches a camera and gripper assembly for an automated storage library, wherein the oscillator output is enabled only during an audit operation by the manipulator control system (see abstract and col. 5, lines 5-19).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to McDieunel Marc whose telephone number is (703) 305-4478. The examiner can normally be reached on 6:30-5:00 Mon-Thu.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski, Jr. can be reached on (703) 308-3873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


McDieunel Marc

Tuesday, March 09, 2004

MM/


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